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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,596	08/16/2001	Nigel John Middleton	27020/37460	6505
4743	7590	03/08/2004	EXAMINER	
MARSHALL, GERSTEIN & BORUN LLP 6300 SEARS TOWER 233 S. WACKER DRIVE CHICAGO, IL 60606			NORDMEYER, PATRICIA L	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/857,596

**Applicant(s)**

MIDDLETON, NIGEL JOHN

**Examiner**

Patricia L. Nordmeyer

**Art Unit**

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-21, 27-34 and 38-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-21, 27-34 and 38-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 16, 2004 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7 – 21, 27 – 34 and 38 – 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Middleton (WO 91/12958) in view of Nold (USPN 5,153,956).

Middleton discloses a breathable fabric or article formed from a sheet of impermeable material (Page 4, lines 14 – 19) with perforations in the material (Page 4, line 20 to Page 5, line 6) that is worn next to the skin of the user (Page 8, line 29 to Page 9, line 3). Projections having a dome shape (Figure 3 B) of the same height due to the same size of perforations (Page 12, lines 29 – 32) are formed on the surfaces of the fabric (Page 11, lines 18 – 23 and Figure 2a, #8). The

Art Unit: 1772

projections are made from an elastomeric material such as neoprene rubber (Page 2, lines 27 – 30), which allows the perforations to remain open during the use of the article (Page 10, lines 5 – 13 and Page 17, lines 1 – 7). One embodiment of the article is made with a laminate where each lamina is made from a different material (Page 2, lines 30 – 32). Chambers, depressions, (Figure 3A, #7) are formed in the material by the layers of materials and perforations, where the perforations are arranged to allow air to flow from surface of the sheet to the other by increased pressure (Page 2, lines 10 – 21). At the location of each perforation, a dome surrounds the outer surface (Page 11, lines 18 – 23 and Figure 2a). The formed sheet is used for a variety of different articles including different types of clothing, orthopedic supports, liners for casts and medical or veterinary dressings (Page 14, line 9 to Page 15, line 13). The layers are adhered on their surfaces by permanent adhesives (Page 10, lines 14 – 18). The breathable article or fabric is made from a laminate of materials, where the laminate includes woven, water-absorbent material (Page 4, lines 7 – 10) and vapor-permeable materials (Page 6, line 20 to Page 7, line 8). However, Middleton fails to disclose the spacer members projection from only the first or only the second major surface, the spacer members being discontinuous, the spacer members being continuous, the continuous spacer member extending across substantially all of at least one side of the sheet and the spacer members comprising a network of ribs on the respective side or sides of the sheet.

Nold teaches a plurality of spacer members on the bottom surface, second surface, (Figure 2) which are located away from the through holes (Figure 2, #16) and permit the protrusions on the top surface to flex and bend when pressure is applied (Column 4, lines 49 –

Art Unit: 1772

59) in a cushioning layer (Column 5, line 31) for the purpose of supporting and lowering the amount of pressure between a body and a surface in order to help prevent bed sores.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the spacer members in Middleton in order to support and lower the amount of pressure between a body and a surface in order to help prevent bed sores as taught by Nold.

It is well settled that a particular shape of a prior invention carries no patentable weight unless the applicant can demonstrate that the new shape provides significant unforeseen improvements to the invention. See *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947). Also, see *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). In the instant case, the application does not indicate any new, significant attributes of the invention due to its shape, which would have been unforeseen to one of ordinary skill in the art. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to change the shape and location of the spacer members to make the continuous, discontinuous or in the shape of ribs. One skilled in the art would have been motivated to do so in order to separate the skin of the user from the fecal material deposited in the article.

#### ***Response to Arguments***

4. Applicant's arguments filed January 16, 2004 have been fully considered but they are not persuasive.

Art Unit: 1772

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Middleton and Nold are disclosing articles to cushion and allow for air circulation underneath a patient's body with similar structures (cushioned surfaces containing openings thru to the other surface). Middleton discloses the claimed invention except for spacer members projecting from the second major surface of the article. Nold discloses a cushioning layer with projections along a first surface and spacer members along a second surface that help air circulate to remove the accumulation of perspiration (Column 4, lines 60 – 65). It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to provide the spacer members of Nold on the second surface of Middleton in order to help air circulate to remove the accumulation of perspiration.

5. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., pumping action) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Art Unit: 1772

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (571) 272-1496. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia L. Nordmeyer  
Examiner  
Art Unit 1772

*pln*  
fpln

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
*1772*

*3/2/04*